

Appl. No. 10/016,100

Amdt. Dated January 31, 2006

Reply to Office action of November 1, 2005

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Remarks/Arguments

The specification is being amended to correct minor errors therein.

Claims 1-4, 6-16 stand rejected as unpatentable, 35 USC 103(a) over Balogh patent publication 2001/0024953 in view of Rautiola et al patent 6,853,851 (hereinafter Rautiola), and claim 5 stands similarly rejected in view of Balogh, Rautiola, and Suzuki et al patent 4,771,424. In response thereto applicants are canceling claims 1 through 16 and presenting in their stead a single new independent claim 17 and three dependent claims.

Applicants' invention is directed to the problems involved in operating a unitary, multiple interface radio terminal operating simultaneously with different parallel transmission protocols over a common frequency range. None of the cited art involves this type of operation.

Balogh, the primary reference, is concerned with selecting that one of a plurality of access points which provides the best connection attributes of those access points which are available, the access points providing access to different networks. As Balogh states, para. 006 "The invention is based on the idea of keeping the connection in the same network as long as possible". This has no relevance to applicants' invention.

Balogh teaches how to select a static connection through a particular access point. Applicants' invention, on the other hand, is concerned with transmitting packets through one of parallel channels over a common frequency range, with the selection of the channels being changeable during the transmission of the packets as conditions change on the channels.

Rautiola does teach a dual mode terminal arrangement wherein the mobile terminal can be connected to either of two different communication networks. As Rautiola states, column 2, line 42 et seq., "A target of the present invention is to present a system which reduces the problems of overlapping networks". Again, there is no reference to or suggestion for a multiple - interface radio terminal operating with different transmission protocols over a common frequency range. Rautiola does disclose that his mobile station may operate in one of two modes. However, as Rautiola states, in the portion referred to by the Examiner at column 6, lines 36 to 40 "In one mode, it connects to a personal base unit 22 (eg either with a inter-connection cable, a infra-red connection, or a low power RF transmitter and receiver), and in another mode connects to a GSM base transceiver station (BTS) 23." Applicants submit that this is not a disclosure or suggestion of applicants' providing two distinct radio interfaces each of which supports transmission within a common frequency range but by different transmission protocols.

Applicants also submit that there is no basis for combining these two disclosures nor is there any suggestion in either reference that such a combination should or could be

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made. It would not, as the Examiner seems to suggest, produce a lower cost if in addition to selecting the access point that provides the best connection, Bologh also provided the different transmission choices suggested by Rautiola.

New claim 17 clearly distinguishes from the cited references, for the reasons discussed above, by providing two radio interfaces that support simultaneous transmission over parallel channels within a common frequency range by two different transmission protocols, with a selector and interface manager for determining the routing of the packets to be transmitted over one of the two channels.

Dependent claim 18 further recites elements in the interface manager for determining which of the channels is to be utilized. Specifically, as recited in claim 18, the diagnostic circuits collect samples of the conditions on the channels during the parallel transmissions so that the routing of packets can be determined and changed during a given communication transmission. Further, as recited in claim 18, the collection of the samples and the storing of the samples occur at separately determined time intervals during the transmission of the streams of data over the channels.

Dependent claim 19 recites that the two protocols specifically are the Bluetooth protocol and the 802.11 protocol. Claim 20 dependent on claim 18 adds that the mode determination circuit in the interface manager causes the selection of the transmission protocol to be utilized dependent on comparisons of the stored samples representative of the conditions on the channels.

Favorable consideration and allowance of new claims 17-20 are therefore respectfully requested.

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It is believed that this application is in condition to be passed to issue, and such action is also respectfully requested. However, if the Examiner deems it would in any way expedite the allowance of the application, the Examiner is invited to telephone applicants' attorney at the number set forth below.

Respectfully submitted,

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